M-16DX 16-Channel Digital Mixer

Using the M-16DX with SONAR LE™

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M16DXWS06

About the Workshop Booklets

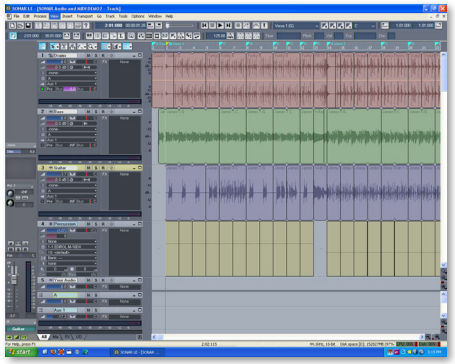
The EDIROL M-16DX 16-Channel Digital Mixer delivers the power of digital mixing to musicians at an incredibly affordable price. This crystal-clear 24-bit digital mixer supports sample rates up to 96 kHz, and it's extremely flexible, with a wide range of analog and digital inputs and outputs, and effects. The M-16DX's USB connectivity makes it an ideal partner for a computer-based digital audio workstation, and features such its pro EQ and the innovative Room Acoustic Control make it an excellent live mixer as well.

Each M-16DX Workshop Series booklet focuses on one M-16DX topic, and is intended as a companion to the *M-16DX Owner's Manual*.

The M-16DX Workshop booklets require M-16DX O.S. Version 2.00 or higher. You can download the latest O.S. for free from *www.RolandUS.com/EDIROL*.

About This Booklet

The M-16DX makes an great companion to a digital audio workstation—or "DAW"—on a personal computer. To learn the basics of using the M-16DX with a DAW, see the Workshop booklet *Using the M-16DX with a DAW*. Then come back here for specific instructions on using the M-16DX with SONAR LE™. You can even control SONAR LE directly from your M-16DX—see the *Using the M-16DX as a DAW Controller* Workshop booklet to learn how.



We'll assume you know how to operate SONAR LE—otherwise, consult SONAR LE's built-in documentation in its Help menu. We'll also assume the M-16DX is connected to your PC, and that they're both powered-up.

Understanding the Symbols in This Booklet

Throughout this booklet, you'll come across information that deserves special attention—that's the reason it's labeled with one of the following symbols.

A note is something that adds information about the topic at hand.

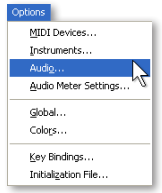
A tip offers suggestions for using the feature being discussed.

Warnings contain important information that can help you avoid possible damage to your equipment, your data, or yourself.

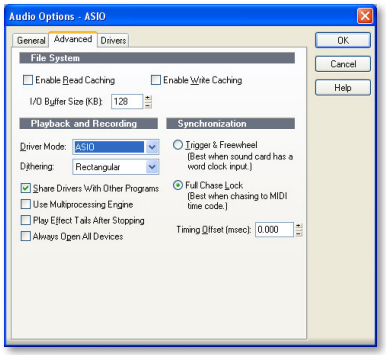
Setting SONAR LE's Audio Options

To configure SONAR LE so it's using the M-16DX for its inputs and outputs:

1. After launching SONAR LE, select Audio... from the Options menu to open the Audio Options window, and then click the Advanced tab.

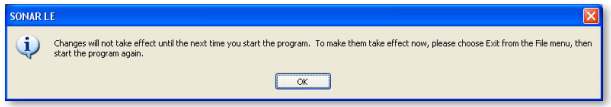


2. Set Driver Mode to ASIO, and click OK.



While the M-16DX can also work in WDM/KS mode, we recommend using ASIO in programs that support its use, such as SONAR LE.

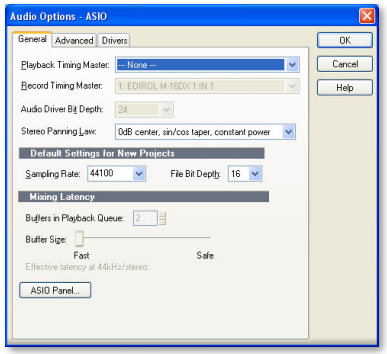
Windows asks you to relaunch SONAR LE for your new settings to take effect.


SONAR LE
Changes will not take effect until the next time you start the program. To make them take effect now, please choose Exit from the File menu, then start the program again.
OK

3 Click OK, quit SONAR LE, and then relaunch the program.

Should you change the Audio Options window's Driver Mode setting to WDM/KS for some reason and restart SONAR LE, Windows XP Wave Profiler may ask you if it's okay to run some timing tests on your audio hardware. Click Yes.

4 After SONAR LE has restarted, close the Quick Start window and return to Audio... in the Options menu.

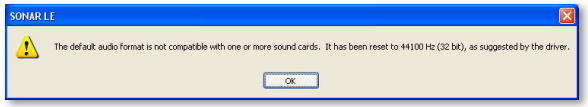


5 In the Audio Options General tab, set Playback Timing Master to 1: EDIROL M-16DX:OUT 1.

6 Set Record Timing Master to 1: EDIROL M-16DX:IN 1.

7 Set Sampling Rate to the M-16DX's sampling rate.

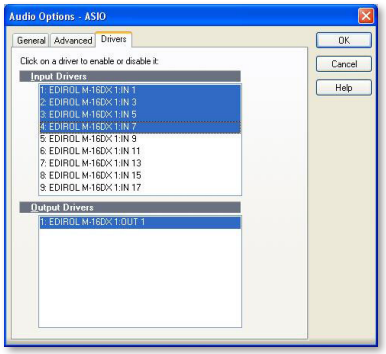
If you select a sampling rate other than the one the M-16DX is using, you'll see a message saying that SONAR LE's sampling rate will be automatically reset to match the M-16DX when you leave the Audio Options window.


SONAR LE
The default audio format is not compatible with one or more sound cards. It has been reset to 44100 Hz (32 bit), as suggested by the driver.
OK

To use another sampling rate, change the M-16DX's rate first as described in the *Using the M-16DX with a DAW* Workshop booklet.

If you want to work on a project in which audio's already been recorded, set the M-16DX's sample rate to match the project's.

8 Click the Drivers tab.



SONAR LE allows you to use up to eight M-16DX channels at a time. They're shown here as pairs of input drivers named for their odd-numbered channel, so you can select any four pairs for use.

If you'll be recording the M-16DX's main stereo mix, make sure that the 9: EDIROL M-16DX1:IN 17 driver is selected—that's the main mix.

9 To de-select a highlighted driver pair, click it once. To select a new pair, click it so it's highlighted.

10 Click OK to exit the Audio Options window.

When you close the Audio Options window, Windows once again tells you that you'll need to relaunch SONAR LE.

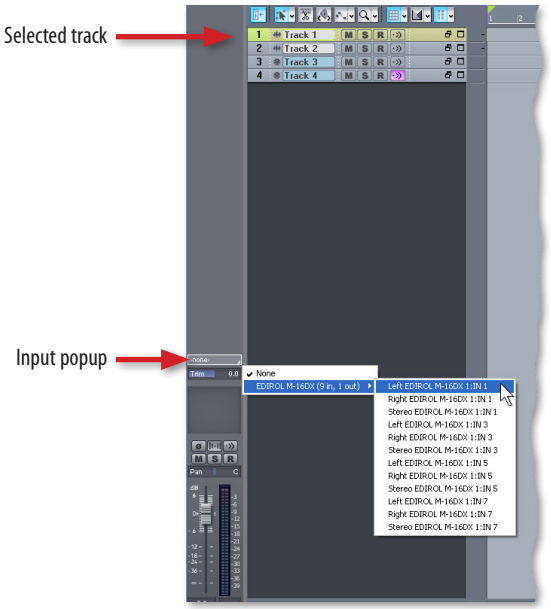
11 Quit and then relaunch SONAR LE.

Setting Up a Track for Recording

Selecting Audio to Record

To set up a track for recording

1 Click the desired track in the Track window to display its channel strip at the lower left corner of the SONAR LE window as shown here.


Selected track
Input popup
Track 1
Track 2
Track 3
Track 4
None
EDIROL M-16DX (9 in, 1 out)
Left EDIROL M-16DX 1:IN 1
Right EDIROL M-16DX 1:IN 1
Stereo EDIROL M-16DX 1:IN 1
Left EDIROL M-16DX 1:IN 3
Right EDIROL M-16DX 1:IN 3
Stereo EDIROL M-16DX 1:IN 3
Left EDIROL M-16DX 1:IN 5
Right EDIROL M-16DX 1:IN 5
Stereo EDIROL M-16DX 1:IN 5
Left EDIROL M-16DX 1:IN 7
Right EDIROL M-16DX 1:IN 7
Stereo EDIROL M-16DX 1:IN 7

2 Click the Input popup menu at the top of the strip, and select what you want to record from the M-16DX. To record

- *a mono input channel to which a mic or instrument is connected*—select the desired Left or Right M-16DX channel.
- *a stereo input channel to which you've connected a keyboard or some other stereo device*—select the desired Stereo channel.
- *one side of a stereo input channel*—select the desired Left or Right channel.
- *the stereo main mix bus*—select Stereo EDIROL M-16DX 1:IN 17.

Only select Input Channels 13/14 or 17/18 when the M-16DX's USB button isn't lit to avoid feedback.

Setting the Track's Output

1 From the track's Output popup menu at the bottom of the strip, select Master.

2 Click the Master track at the bottom of the Track window, and check its Output popup menu—it should be set to use the M-16DX's OUT 1 driver. If it's not, set the Master's output to EDIROL M-16DX 1:OUT 1.

Turn Off Software Monitoring

1 If the track's channel strip isn't visible, click the track in the Track window.

2 Click the channel's Input Echo button so it's not lit.

As we noted in the *Using the M-16DX with a DAW* Workshop booklet, you do have the option of listening through SONAR LE if you want to hear its effects as you record. However, since you'll encounter latency doing this, we recommend listening directly through the M-16DX.

Troubleshooting

If you have any problems playing or recording audio in SONAR LE, check its built-in online Help in the Help menu. As we noted in the *Using the M-16DX with a DAW* booklet, you can also find Windows XP troubleshooting tips at MusicXP.net at *http://musicxp.net/tuning_tips.php*.

You can also click the ASIO Panel... button in the Audio Options window—this opens the M-16DX's control pane. Raising the Audio Buffer Size value can reduce pops and clicks, though it will also increase latency if you're working with soft synths in SONAR LE. Likewise, you may want to try checking the Use Smaller ASIO Buffer Size ASIO Setting checkbox.

The End

We hope you've found this workshop helpful. You'll find other M-16DX Workshop booklets available for downloading at *www.RolandUS.com/EDIROL*.